

What is claimed is:

1. A crosslinked biodegradable stent comprising at least one layer or zone of biological material, said biological material comprising at least one bioactive agent and being crosslinked with a means for crosslinking said biological material.
2. The crosslinked biodegradable stent of claim 1, wherein the biological material is selected from a group consisting of collagen, gelatin, elastin, chitosan, NOCC, fibrin glue, biological sealant, chitosan-alginate complex, and combination thereof.
3. The crosslinked biodegradable stent of claim 1, wherein the biological material is crosslinked with a crosslinking agent selected from a group consisting of genipin, its analog, derivatives, and combination thereof, aglycon geniposidic acid, epoxy compounds, dialdehyde starch, glutaraldehyde, formaldehyde, dimethyl suberimide, carbodiimides, succinimidyls, diisocyanates, acyl azide, reuterin, and combination thereof.
4. The crosslinked biodegradable stent of claim 1, wherein the biological material is crosslinked with a means for crosslinking said material, the means comprising exposing said material to ultraviolet irradiation, dehydrothermal treatment, tris(hydroxymethyl)phosphine, ascorbate-copper, glucose-lysine or photo-oxidizers.
5. The crosslinked biodegradable stent of claim 1, wherein the biological material is crosslinked with a reversible crosslinking agent selected from a group consisting of polyphenolic compounds, proanthocyanidin, epigallocatechin gallate, epicatechin, epigallocatechin, epicatechin gallate, and combination thereof.
6. The crosslinked biodegradable stent of claim 1, wherein the stent is configured a cylindrical shape that has a first circumference length before contacting water and a second circumference length after contacting water, wherein the second circumference length is at least 5% more than the first circumference length.
7. The crosslinked biodegradable stent of claim 1, wherein the stent comprises a plurality of open-ring stent members along with a longitudinal stent base, said stent being configured in a cylindrical manner.
8. The crosslinked biodegradable stent of claim 1, wherein the stent is configured in a generally cylindrical shape, said stent comprising at least one spiral film.
9. A crosslinked biodegradable implant comprising at least one layer or zone of biological material, said biological material comprising at least one bioactive agent and being crosslinked with a means for crosslinking said biological material.
10. The implant of claim 9, wherein the implant comprises a first layer or zone of a first biological material with a first bioactive agent and a second layer or zone of a second biological material with a second bioactive agent.
11. The implant of claim 10, wherein the implant further comprises a third layer or zone of a third biological material with a third bioactive agent.
12. The implant of claim 9, wherein the at least one layer or zone is made of a biodegradable shape memory polymer.
13. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of analgesics/antipyretics, antiasthmatics, antibiotics, antidepressants, antidiabetics, antifungal agents, antihypertensive agents, anti-inflammatories, antineoplastics, antianxiety agents, immunosuppressive

agents, antimigraine agents, sedatives/hypnotics, antipsychotic agents, antimanic agents, antiarrhythmics, antiarthritic agents, antigout agents, anticoagulants, thrombolytic agents, antifibrinolytic agents, antiplatelet agents and antibacterial agents, antiviral agents, antimicrobials, anti-infectives, and combination thereof.

14. The implant of claim 9, wherein the at least one bioactive agent comprises an angiogenesis factor or anti-angiogenesis factor.

15. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of actinomycin D, paclitaxel, vincristin, methotrexate, angiopeptin, batimastat, halofuginone, sirolimus, tacrolimus, everolimus, ABT-578, tranilast, dexamethasone, mycophenolic acid, and combination thereof.

16. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of lovastatin, thromboxane A₂ synthetase inhibitors, eicosapentanoic acid, ciprostone, trapidil, angiotensin converting enzyme inhibitors, aspirin, heparin, and combination thereof.

17. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of allicin, ginseng extract, ginsenoside Rg1, flavone, ginkgo biloba extract, glycyrrhetic acid, lipostabil, proanthocyanides, and combination thereof.

18. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of ApoA-I Milano or recombinant ApoA-I Milano/phospholipid complexes.

19. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of biological cells or endothelial progenitor cells.

20. The implant of claim 9, wherein the at least one bioactive agent is selected from a group consisting of a growth factor selected from a group consisting of vascular endothelial growth factor, transforming growth factor-beta, insulin-like growth factor, platelet derived growth factor, fibroblast growth factor, and combination thereof.

21. The implant of claim 9, wherein the biological material is selected from a group consisting of collagen, gelatin, elastin, chitosan, NOCC, fibrin glue, biological sealant, chitosan-alginate complex, and combination thereof.

22. The implant of claim 9, wherein the means for crosslinking said biological material comprises crosslinking with a crosslinking agent selected from a group consisting of genipin, its analog, derivatives, and combination thereof, aglycon geniposidic acid, epoxy compounds, dialdehyde starch, glutaraldehyde, formaldehyde, dimethyl suberimidate, carbodiimides, succinimidyls, diisocyanates, reuterin, and acyl azide.

23. The implant of claim 9, wherein the means for crosslinking said biological material comprises exposing said material to ultraviolet irradiation, dehydrothermal treatment, tris(hydroxymethyl)phosphine, ascorbate-copper, glucose-lysine or photo-oxidizers

24. The implant of claim 9, wherein the means for crosslinking said biological material comprises crosslinking with a reversible crosslinking agent selected from a group consisting of polyphenolic compounds, proanthocyanidin, epigallocatechin gallate, epicatechin, epigallocatechin, epicatechin gallate, and combination thereof.

25. A method of treating a target tissue of a patient comprising:

providing a biodegradable stent made of at least one layer or zone of biological material, said biological material comprising at least one bioactive agent;

crosslinking the biological material; and

delivering the stent to the target tissue and releasing the bioactive agent for treating the target tissue.

26. The method of claim 25, wherein the target tissue is atherosclerosis plaque or vulnerable plaque.
27. A crosslinked biodegradable stent comprising at least one layer or zone of crosslinkable material, said crosslinkable material comprising at least one bioactive agent and being crosslinked with a means for crosslinking said biological material.
28. The stent of claim 27, wherein the crosslinkable material comprises poly(amides) or poly(ester amides).